ABSTRACT

An expandable shaft (5) includes an outer shaft (13;13A;13B;13C;13D) and an inner shaft (14;14A;14B;14C;14D;14E;14F). Plural rolling elements (15) are pinched elastically in a space between raceway groves (16;17) of the outer shaft (13;13A;13B;13C;13D) and the inner shaft (14;14A;14B;14C;14D;14E;14F) by an elastic restoring force of the outer shaft (13;13A;13B;13C;13D). An outer peripheral surface (141) of the inner shaft (14;14A;14B;14C;14D;14E;14F) includes at least a pair of flat portions (21;22;41;42;43;44;45;46) that are parallel to each other. An inner peripheral surface (131) of the outer shaft (13;13A;13B;13C;13D) includes at least a pair of flat limiting portions (31;32;71;72;73;74) that are parallel to each other. The respective limiting portions (31;32;71;72;73;74) limit a quantity of relative rotation of the outer shaft (13;13A;13B;13C;13D) and the inner shaft (14;14A;14B;14C;14D;14E;14F) by engaging with the corresponding flat portions (21;22;41;42;43;44;45;46). A deformation promoting portion (33;33A;33B;33C;33D;33E;33F;33G;33H;330) to promote deformation of the outer shaft (13;13A;13B;13C;13D) is placed in a specific region of the outer shaft (13;13A;13B;13C;13D) in a circumferential direction. The specific region is a region between a plane (C1) including a center of curvature

(A2) of the raceway groove (16) of the outer shaft (13;13A;13B;13C;13D) as well as a central axis line (A1) of the outer shaft (13;13A;13B;13C;13D) and each limiting portion (31;32;71;72;73;74).